

## **REMARKS**

This is a full and timely response to the outstanding non-final Office Action mailed August 4, 2008. Upon entry of the amendments in this response, claims 1, 3 – 39, and 42 remain pending. In particular, Applicants add claim 42 and amend claims 1, 11, 15, and 19 – 23. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

### **I. Rejections Under 35 U.S.C. §101**

The Office Action indicates that claim 19 stands rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. Applicants amend claim 19, as indicated above. Applicants submit that these amendments comply with the Office Action request and that claim 19 meets all the requirements of 35 U.S.C. §101.

### **II. Rejections Under 35 U.S.C. §103**

#### **A. Claim 1 is Allowable Over *Bauer* in view of *Rabbers***

The Office Action indicates that claim 1 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent Number 5,870,765 ("*Bauer*") in view of U.S. Patent Number 7,257,649 ("*Rabbers*"). Applicants respectfully traverse this rejection for at least the reason that *Bauer* in view of *Rabbers* fails to disclose, teach, or suggest all of the elements of claim 1. More specifically, claim 1 recites:

A data management system comprising:  
a plurality of storage devices individually comprising a physical storage space, wherein the physical storage space of one of the storage devices is configured to store a baseline version of a data object and the physical storage space of another of the storage devices is configured to store a delta version of the data object; and  
processing circuitry configured to control storage operations of at least one of the storage devices to process a restore request with respect to the data object, to access the delta version from the other of the storage devices responsive to the restore request, **wherein accessing the delta version includes querying a trafficking database of a cell manager to obtain data indicating storage locations of the delta version**, and to initiate communication of data of the baseline version and the delta version of the data object to a computer system, wherein the processing circuitry is further configured to act as a proxy to extract remotely stored delta versions.

**(Emphasis added).**

Applicants respectfully submit that claim 1, as amended, is allowable over the cited art for at least the reason that neither *Bauer* nor *Rabbers*, taken alone or in combination, discloses, teaches, or suggests a "data management system, comprising... processing circuitry configured to control storage operations of at least one of the storage devices to process a restore request with respect to the data object, to access the delta version from the other of the storage devices responsive to the restore request, **wherein accessing the delta version includes querying a trafficking database of a cell manager to obtain data indicating storage locations of the delta version**" as recited in claim 1, as amended. More specifically, *Bauer* discloses a "database synchronizer... [that] forms a database synchronization between a client database and a server database" (column 2, line 5). However, *Bauer* fails to suggest "processing circuitry configured to control storage operations of at least one of the storage devices to process a restore request with respect to the data object, to access the delta version from the other of the storage devices responsive to the restore request, **wherein accessing the delta version includes querying a trafficking database of a cell manager to obtain data indicating storage locations of the delta version**" as recited in claim 1, as amended.

Further, *Rabbers* fails to overcome the deficiencies of *Bauer*. More specifically, *Rabbers* discloses a "sync client 401 [that] can request a delta extract from server 116" (column 11, line 50).

However, *Rabbers* fails to even suggest "processing circuitry configured to control storage operations of at least one of the storage devices to process a restore request with respect to the data object, to access the delta version from the other of the storage devices responsive to the restore request, **wherein accessing the delta version includes querying a trafficking database of a cell manager to obtain data indicating storage locations of the delta version**" as recited in claim 1, as amended. For at least this reason, claim 1, as amended, is allowable.

**B. Claim 11 is Allowable Over *Bauer* in view of *Rabbers***

The Office Action indicates that claim 11 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent Number 5,870,765 ("*Bauer*") in view of U.S. Patent Number 7,257,649 ("*Rabbers*"). Applicants respectfully traverse this rejection for at least the reason that *Bauer* in view of *Rabbers* fails to disclose, teach, or suggest all of the elements of claim 11. More specifically, claim 11 recites:

A data management system comprising:

a plurality of storage subsystem means individually comprising physical storage means for storing data corresponding to a plurality of data objects and processing means for controlling storage operations with respect to the respective physical storage means;

database means for tracking storage locations of data of the data objects in corresponding ones of the storage subsystem means;

wherein the processing means of one of the storage subsystem means comprises means for controlling the storage of a baseline version of a data object using the respective physical storage means corresponding to the one of the storage subsystem means and for initiating the storage of a delta version of the data object using an other of the storage subsystem means;

wherein the database means comprises means for storing information regarding the storage location of the delta version using the other of the storage subsystem means; and

wherein the processing means outputs the delta version to the other of the storage subsystem means after determining that insufficient storage capacity exists at the one of the storage subsystem means to store the delta version, wherein the processing means is further configured to verify storage of the baseline version of data with a manager means for tracking purposes using the database means, **wherein the processing**

***means is further configured to query a trafficking database of a cell manager to obtain data indicating storage locations for the delta version.***

***(Emphasis added).***

Applicants respectfully submit that claim 11, as amended, is allowable over the cited art for at least the reason that neither *Bauer* nor *Rabbers*, taken alone or in combination, discloses, teaches, or suggests a "data management system... ***wherein the processing means is further configured to query a trafficking database of a cell manager to obtain data indicating storage locations for the delta version***" as recited in claim 11, as amended. More specifically, *Bauer* discloses a "database synchronizer... [that] forms a database synchronization between a client database and a server database" (column 2, line 5). However, *Bauer* fails to suggest "data management system... ***wherein the processing means is further configured to query a trafficking database of a cell manager to obtain data indicating storage locations for the delta version***" as recited in claim 11, as amended.

Further, *Rabbers* fails to overcome the deficiencies of *Bauer*. More specifically, *Rabbers* discloses a "sync client 401 [that] can request a delta extract from server 116" (column 11, line 50). However, *Rabbers* fails to even suggest "data management system... ***wherein the processing means is further configured to query a trafficking database of a cell manager to obtain data indicating storage locations for the delta version***" as recited in claim 11, as amended. For at least this reason, claim 11, as amended, is allowable.

**C. Claim 15 is Allowable Over *Bauer* in view of *Rabbers***

The Office Action indicates that claim 15 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent Number 5,870,765 ("*Bauer*") in view of U.S. Patent Number 7,257,649 ("*Rabbers*"). Applicants respectfully traverse this rejection for at

least the reason that *Bauer* in view of *Rabbers* fails to disclose, teach, or suggest all of the elements of claim 15. More specifically, claim 15 recites:

A data management system storage device comprising:  
an interface configured to communicate data with respect to other storage devices of a data management system, and to communicate data of a data object with respect to a computer system;  
a physical storage space configured to store a baseline version of the data object at an initial moment in time; and  
processing circuitry configured to receive a request to store a delta version of the data object at a subsequent moment in time after the initial moment in time, to obtain information regarding a capacity of the storage device, and to initiate storage of the delta version of the data object using one of the other storage devices of the data management system responsive to the analysis of the information, wherein the processing circuitry outputs the delta version to the one of the other storage devices after determining that insufficient storage capacity exists at the storage devices to store the delta version, the processing circuitry being further configured to verify storage of the baseline version of the data object with a cell manager for tracking purposes using a tracking *the processing circuitry further configured to query a trafficking database of the cell manager to obtain data indicating storage locations of the delta version.*

*(Emphasis added).*

Applicants respectfully submit that claim 15, as amended, is allowable over the cited art for at least the reason that neither *Bauer* nor *Rabbers*, taken alone or in combination, discloses, teaches, or suggests a "data management system storage device comprising... processing circuitry... *the processing circuitry further configured to query a trafficking database of the cell manager to obtain data indicating storage locations of the delta version*" as recited in claim 15, as amended. More specifically, *Bauer* discloses a "database synchronizer... [that] forms a database synchronization between a client database and a server database" (column 2, line 5). However, *Bauer* fails to suggest a "data management system storage device comprising... processing circuitry... *the processing circuitry further configured to query a trafficking database of the cell manager to obtain data indicating storage locations of the delta version*" as recited in claim 15, as amended.

Further, *Rabbers* fails to overcome the deficiencies of *Bauer*. More specifically, *Rabbers* discloses a "sync client 401 [that] can request a delta extract from server 116" (column 11, line 50). However, *Rabbers* fails to even suggest a "data management system storage device comprising... processing circuitry... **the processing circuitry further configured to query a trafficking database of the cell manager to obtain data indicating storage locations of the delta version**" as recited in claim 15, as amended. For at least this reason, claim 15, as amended, is allowable.

**D. Claim 19 is Allowable Over *Bauer* in view of *Rabbers***

The Office Action indicates that claim 19 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent Number 5,870,765 ("*Bauer*") in view of U.S. Patent Number 7,257,649 ("*Rabbers*"). Applicants respectfully traverse this rejection for at least the reason that *Bauer* in view of *Rabbers* fails to disclose, teach, or suggest all of the elements of claim 19. More specifically, claim 19 recites:

A computer-readable medium that stores a program that, when executed by a computer, causes processing circuitry of one of a plurality of storage devices of a data management system to:

- receive a request to store a baseline version of a data object;
- store the baseline version using physical storage space of the one of the storage devices;
- receive a request to store a delta version of the data object after effecting storage of the baseline version;
- access information regarding a status of the one of the storage devices;
- determine that the one of the storage devices has insufficient storage capacity to store the delta version; and
- store the delta version using an other of the storage devices of the data management system after determining that the one of the storage devices has insufficient storage capacity to store the delta version, the processor-usable tangible medium being further configured to verify storage of the baseline version of the data object with a cell manager for tracking purposes using a tracking database, **wherein the processing circuitry is further configured to query a trafficking database of the cell manager to obtain data indicating storage locations of the stored delta version.**

***(Emphasis added).***

Applicants respectfully submit that claim 19, as amended, is allowable over the cited art for at least the reason that neither *Bauer* nor *Rabbers*, taken alone or in combination, discloses, teaches, or suggests a "computer-readable medium that stores a program... ***wherein the processing circuitry is further configured to query a trafficking database of the cell manager to obtain data indicating storage locations of the stored delta version***" as recited in claim 19, as amended. More specifically, *Bauer* discloses a "database synchronizer... [that] forms a database synchronization between a client database and a server database" (column 2, line 5). However, *Bauer* fails to suggest a "computer-readable medium that stores a program... ***wherein the processing circuitry is further configured to query a trafficking database of the cell manager to obtain data indicating storage locations of the stored delta version***" as recited in claim 19, as amended.

Further, *Rabbers* fails to overcome the deficiencies of *Bauer*. More specifically, *Rabbers* discloses a "sync client 401 [that] can request a delta extract from server 116" (column 11, line 50). However, *Rabbers* fails to even suggest a "computer-readable medium that stores a program... ***wherein the processing circuitry is further configured to query a trafficking database of the cell manager to obtain data indicating storage locations of the stored delta version***" as recited in claim 19, as amended. For at least this reason, claim 19, as amended, is allowable.

**E. Claim 23 is Allowable Over *Bauer* in view of *Rabbers***

The Office Action indicates that claim 23 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent Number 5,870,765 ("*Bauer*") in view of U.S. Patent Number 7,257,649 ("*Rabbers*"). Applicants respectfully traverse this rejection for at least the reason that *Bauer* in view of *Rabbers* fails to disclose, teach, or suggest all of the elements of claim 23. More specifically, claim 23 recites:

A data management method comprising:  
receiving a baseline version of a data object of a computer system using one of a plurality of storage devices of a data management system;  
storing the baseline version using the one of the storage devices after the reception of the baseline version;  
receiving a request using the one of the storage devices, wherein the request comprises a request to store a delta version of the baseline version; analyzing a capacity of the one of the storage devices; determining, that the one of the storage devices has insufficient storage capacity to store the delta version; and  
storing the delta version using an other of the storage devices after determining that the one of the storage devices has insufficient storage capacity to store the delta version;  
verifying storage of the baseline version of the data object with a cell manager for tracking purposes using a tracking database; and  
***processing a restore request, wherein processing the restore request includes querying a trafficking database of the cell manager to obtain data indicating storage locations of the delta version.***

***(Emphasis added).***

Applicants respectfully submit that claim 23, as amended, is allowable over the cited art for at least the reason that neither *Bauer* nor *Rabbers*, taken alone or in combination, discloses, teaches, or suggests a "computer-readable medium that stores a program... ***wherein the processing circuitry is further configured to query a trafficking database of the cell manager to obtain data indicating storage locations of the stored delta version***" as recited in claim 23, as amended. More specifically, *Bauer* discloses a "database synchronizer... [that] forms a database synchronization between a client database and a server database" (column 2, line 5). However, *Bauer* fails to suggest a "data management method comprising... ***processing a restore request, wherein processing the restore request includes querying a trafficking database of the cell manager to obtain data indicating storage locations of the delta version***" as recited in claim 23, as amended.

Further, *Rabbers* fails to overcome the deficiencies of *Bauer*. More specifically, *Rabbers* discloses a "sync client 401 [that] can request a delta extract from server 116" (column 11, line 50).



However, *Rabbers* fails to even suggest a “data management method comprising... ***processing a restore request, wherein processing the restore request includes querying a trafficking database of the cell manager to obtain data indicating storage locations of the delta version***” as recited in claim 23, as amended. For at least this reason, claim 23, as amended, is allowable.

**F. Claims 3 – 10, 12 – 14, 16 – 18, 20 – 22, and 24 – 35 are Allowable Over *Bauer* in view of *Rabbers***

The Office Action indicates that claims 3 – 10, 12 – 14, 16 – 18, 20 – 22, and 24 – 35 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent Number 5,870,765 (“*Bauer*”) in view of U.S. Patent Number 7,257,649 (“*Rabbers*”). Applicants respectfully traverse this rejection for at least the reason that *Bauer* in view of *Rabbers* fails to disclose, teach, or suggest all of the elements of claims 3 – 10, 12 – 14, 16 – 18, 20 – 22, and 24 – 35. More specifically, dependent claims 3 – 10 and 31 – 35 are believed to be allowable for at least the reason that these claims depend from and include the elements of allowable independent claim 1. Dependent claims 12 – 14 are believed to be allowable for at least the reason that they depend from and include the elements of allowable independent claim 11. Dependent claims 16 – 18 are believed to be allowable for at least the reason that they depend from and include the elements of allowable independent claim 15. Dependent claims 20 – 22 are believed to be allowable for at least the reason that they depend from and include the elements of allowable independent claim 19. Dependent claims 24 – 30 are believed to be allowable for at least the reason that they depend from and include the elements of allowable independent claim 23. *In re Fine, Minnesota Mining and Mfg. Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

**G. Claims 36 – 39 are Allowable Over *Bauer* in view of *Rabbers* in view of *Rothbarth***

The Office Action indicates that claims 36 – 39 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent Number 5,870,765 ("*Bauer*") in view of U.S. Patent Number 7,257,649 ("*Rabbers*") further in view of U.S Patent Publication Number 2004/0078602 ("*Rothbarth*"). Applicants respectfully traverse this rejection for at least the reason that *Bauer* in view of *Rabbers* in further view of *Rothbarth* fails to disclose, teach, or suggest all of the elements of claims 36 – 39. More specifically, dependent claim 36 is believed to be allowable over *Bauer* and *Rabbers* for at least the reason that this claim depends from and includes the elements of allowable independent claim 15. Further, dependent claims 37 – 39 are believed to be allowable over *Bauer* and *Rabbers* for at least the reason that they depend from and include the elements of allowable independent claim 19. Because *Rothbarth* fails to overcome the deficiencies of over *Bauer* and *Rabbers*, claims 36 – 39 are allowable as a matter of law. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002).

**III. New Claim 42**

In addition, Applicants add new claim 42. New claim 42 is allowable over the cited art for at least the reason that this claim depends from allowable independent claim 1. *In re Fine, Minnesota Mining and Mfg.Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002). Support for this claim may be found, among other places in paragraph [0061].

### **CONCLUSION**

In light of the foregoing amendments and for at least the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested.

Any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and Official Notice, or statements interpreted similarly, should not be considered well-known for the particular and specific reasons that the claimed combinations are too complex to support such conclusions and because the Office Action does not include specific findings predicated on sound technical and scientific reasoning to support such conclusions.

If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

/afb/

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